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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,082

09/12/2003

Kenneth J. Taylor

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09/02/2008

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EXAMINER

GORTAYO, DANGELINO N

ART UNIT

PAPER NUMBER

2168

MAIL DATE

DELIVERY MODE

09/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/662,082	Applicant(s) TAYLOR, KENNETH J.	
	Examiner DANGELINO N. GORTAYO	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The currently pending claims considered below are claims 7-11.

Terminal Disclaimer

2. The terminal disclaimer filed on 5/22/2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6,658,589 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bamford et al. ("Bamford" US Patent 5,449,367, issued 3/12/1996) in view of Crowe et al. (US Patent 5,970,488)

As per claim 7, Bamford teaches "In a computer system having a plurality of nodes, each node having access to a shared common database and also having local storage," (see Abstract, Figure 3, wherein client nodes composed of memory and a processor access a shared database)

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“providing a local redo log in local storage for said node, said node including information regarding data in said shared common database” (Figure 3, column 5 lines 55-64, column 6 lines 20-30, 42-53, wherein each client is provided with a log and access to a common database)

selecting at least one of said nodes to perform an operation (column 12 line 10 – column 14 line 9, wherein a client is chosen and submits database modification requests)

“obtaining information regarding a directory location of said local redo log for said at least one node;” (column 10 lines 23-59 and column 14 lines 3-9, wherein a log is located for the client)

“setting said local redo log to be read/write accessible by said selected at least one node;” (column 6 lines 3-14 and lines 31-39, wherein the log can be read and written by clients)

backing up data in said shared common database by accessing data in said shared common database (Figure 3, column 6 lines 56-67, column 8 lines 55-67, column 10 lines 8-15, wherein data is modified and stored in a shared database)

Bamford does not teach selecting a node to perform backup operations and backing up data in said node by accessing data in said node to provide backup data.

Crowe teaches selecting a node to perform backup operations and backing up data in said node by accessing data in said node to provide backup data. (column 2 lines 19-28, column 10 line 57 – column 11 line 27, column 11 lines 53-65, column 12 lines 52-62, wherein a copy of the database is stored in each machine and an updated

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table list is stored with an updated record list to track and access copies of the database)

It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Bamford's method of providing a log system to clients in a system that tracks information in a central database with Crowe's method of storing a copy of a database in a plurality of nodes for backup purposes. This gives the user the advantage of providing backup operations in Bamford's method in addition to the recovery process to respond to failures in the system. The motivation for doing so would be speed up an update process and reduce the cost of maintaining copies of data in a database system (column 2 lines 1-16).

As per claim 8, Bamford teaches "said archived redo logs in local files on each of said nodes are set to be read and write accessible through mounting with a network file system (NFS), using the same name each of said nodes." (column 33-67)

As per claim 9, Bamford teaches "said archived redo logs are created with names which allow a backup or recover utility to identify which node an archived redo log belongs." (column 10 lines 14-28)

As per claim 10, Crowe teaches "before said step of running a backup utility which backs up said common data and said archived redo logs for said computer system, shutting down access to said common data." (column 9 lines 27-43)

As per claim 11, Crowe teaches "said backup utility allows for a user- supplied scripts for shutting down access to said common data." (column 9 lines 27-43)

Response to Arguments

5. Applicant's arguments, see page 4, filed 5/22/2008, with respect to the rejection of claims 7-11 in regards to 35 USC 103(a) have been fully considered but they are not persuasive.

a. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-I]

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

b. Applicant's arguments is stated as Bamford in view of Crowe does not teach selecting at least one node to perform backup operations and backing up data in said node and said shared common database by accessing data in said node and said shared common database and also in said local redo log to provide back up data.

In regards to the argument, examiner respectfully disagrees. The argument as stated as Crowe does not specifically teach the method of backing up a shared common database. The examiner respectfully points out that the prior art of Crowe is utilized by the examiner to teach the step of selecting a node

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for backup operations and backing up the data in said node. Crowe teaches that data is broadcast in the whole network and the nodes in the network process and store the data, acting as a backup, as summarized in column 2 lines 18-28. As further disclosed in column 10 line 57 - column 11 line 27, an Object Manager selects the nodes in the network to receive data updates that the respective nodes then stores for backup purposes. This is then combined with the prior art of Bamford, which teaches a distributed log system with a shared database, as can be seen in figure 3, wherein reference 323 and 324 are the log that are dedicated to specific nodes, and reference 325 discloses a shared databases between the clients. As disclosed in column 6 lines 20-38 of Bamford, data is written on the shared database and can also be modified according to column 6 line 56-67. By combining the ability of Crowe for each node to be selected for backup purposes and store backup data in each node with Bamford's ability to record log information and store backup data in a shared common database, shared between clients, all the limitations of claim 7 is disclosed.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941

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(Fed. Cir. 1992). In this case, the prior art of Crowe, utilized to combine with the primary art of Bamford, teaches that previous backup and update operations related to a shared database is too slow and cumbersome, and it would be hard-pressed to utilize it in a real-time system, so more efficient backup operation procedures are necessary (column 2 lines 1-16). Bamford's method of utilizing logs when updating backup data in a network including a shared database would benefit from Crowe's ability to keep backup information in individual nodes of the network.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANGELINO N. GORTAYO whose telephone number is (571)272-7204. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dangelino N Gortayo/
Examiner, Art Unit 2168

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